

CHAPTER 23

RETIREMENT

During my childhood, thoughts of retirement never crossed my mind. Accidents in the workplace were not uncommon, and the family or the church cared for unlucky ones. People who escaped injury or had safe jobs worked until infirmities forced them to cease working. A few years later, most died. The exceptions were regarded with awe and respect. I never knew one of my grandmothers, but both grandfathers and the remaining grandmother died at what would now be regarded as an early age. All had health problems that prevented activities now regarded as the "right" of senior citizens.

My father's secure job as a freight solicitor for the New Jersey Central Railroad shielded me from the suffering endured by many during the Depression, but the evidence of the hardship it brought to many was observable even to a six-year old. Short-term survival, rather than retirement, was the preoccupation of the Depression years, which continued, especially for those of us in the armed forces, during World War II.

When I joined the curatorial staff of the Academy of Natural Sciences (ANSP) in 1948, most of the senior curators were well past the normal retirement age. The renowned malacologist Henry Pilsbury died at age 95 with papers in press. When Social Security was proposed by the ANSP administration, some senior curators resisted, fearing they would be required to retire. When reassured that no one would be forced out, they ceased to object, but they clearly had no intent to use a retirement plan. What an example to encounter early in my professional career! Age had neither diminished their zest for their chosen field nor had it eliminated their creative abilities. Impaired, perhaps; diminished, possibly; but I would not have stated these assertions since some of them were outperforming people less than half their age.

The microscopy laboratory, in which I worked for a year or so, was on the hall of Dr. Pilsbury's laboratory/office, which had a glass window in the door. When the smoke from his pipe was in an undisturbed layer about five feet above the floor, no one ever disturbed him because we never knew how he would respond to an intrusion. Clearly, his zest for malacology was still a major factor in his life. Although I almost certainly did not appreciate it fully at the time, I had learned a crucial lesson: do what is enjoyable, and retirement will be relegated to an administrative and financial change, but not a total loss of cherished activities.

This view has been continually reinforced over the years. Ruth Patrick remains enthusiastic about and absorbed in her professional activities. She should be remembered, not as a legendary person, but as a person so excited by her "work" that it was always a special occasion! Nearly four decades ago, I had the good fortune to meet Abel Wolman, who died in his mid-90s. A member of one professional organization told me that Abel had been invited to give an "end of career" address at each of the ages 65, 75, 80, 85, and 90. In each address, he challenged members to explore new problems! Wolman always remained fascinated by a wide array of topics. One of my favorite recollections of Abel Wolman is a picture of him in formal attire, holding a glass of champagne with the pyramids of Egypt in the background. Fortunately, a similar version of this memorable photograph (without champagne bucket or glass) is used on the programs of the annual Abel Wolman Distinguished Lecture of the National Academy of Sciences. These two illustrations are just examples of the people who have shaped my view of retirement. My view of a great retirement is for me to die with manuscripts "in press" and to have a trusted person available to read the galley proofs.

I formally retired in 1995. The greatest personal event in this retirement period was the loss of companionship with my spouse Jean to Alzheimer's and Parkinson's afflictions and, finally, her death. Now I live in a world without Jean. I have also been forced to give up hiking the Appalachian Trail, fly fishing in small trout streams with slippery rocks, and swimming. I can now walk several miles daily on paved surfaces and hope to return to woodland trails when my balance improves.

The best professional decision in my retirement years was becoming associated with the Eco-ethics International Union and Professor Otto Kinne. Over half my writing is now on the topic of eco-ethics, sustainability ethics, and related topics. I believe that the conflict between economic growth and sustainable use of the planet is basically a difference in values. Economic growth is basically homocentric, while sustainability ethics attempts to integrate homocentric and eco-centric ethics. Failure to achieve this latter goal will, quite likely, damage both human society and the integrity of Earth's biospheric life support system.

Our children, Karen, Stefan, Duncan, and Heather, have been indispensable in keeping me in touch with the past (by recalling shared experiences) and with the future (by discussing my retirement options and by providing basic training for the electronic age). They have been a blessing in helping me cope with both the loss of Jean and my partial loss of personal independence. Former graduate students have also kept me in touch with my professional past.

One of the most important aspects of retirement is socialization. Throughout my early life, I have had interactions with substantial numbers of people. Going to The Pennsylvania State University in 1940 cut me off from frequent association with people who had been so important in my life. My only daily link with that period of my life was my high school companion and Penn State classmate Arnie Perloff. Going to college was my first experience with loneliness. In those days, private phones were rare, cell phones non-existent. Subsequently, Arnie and I joined fraternities. Mine, Alpha Zeta, was both honorary and social, but it was the latter that initially attracted me. Then, I met Jean, who was my companion for 63 years.

In the first five years of formal retirement, Jean and I hiked together daily and attended many social, musical, theatrical, and religious events. In March 2000 when Jean's Alzheimer's worsened and for a variety of other reasons, we moved to a townhouse in Warm Hearth Retirement Village. However, Jean's condition worsened and she needed 24-hour care in the nursing facility. I suffered less mobility from four spinal compression fractures, and I decided to move to the assisted living center at Warm Hearth. I had companionship at meals and other times, and I was close to the nursing home for visits with Jean. I have a three-room apartment, consisting of a living room, two bedrooms (one converted to a den with computer, printer, and many shelves of books), two baths, and a tiny kitchenette. Three meals are served in the dining room; I spend more time writing instead of buying and preparing food. Housekeeping cleans my apartment weekly and does my laundry. All these services save me significant amounts of time. A minor heart attack in early January 2005 validated my decision to transfer to an assisted living center.

My life is rich, despite the loss of many activities I once enjoyed. Even if I could still do everything I could a decade ago, most of the joy would be gone without Jean's companionship.

Years ago, Jean and I frequently hugged each other. We even had a small card that read: "Good for a Free Hug from any Consenting Adult," which we would give the other person if we felt the need for a hug. Alzheimer's blocked such an exchange. However, every time I visited Jean, I would start with some hugs, then seven "unasked for" kisses (Jean always said these were the best kind), then strokes of my hand on both her cheeks, and finally a back rub. Before I began this ritual, I always said, "This is Johnny right beside you." Linking verbal and non-verbal communication seemed to work—Jean would hold out her arms to me when I held out mine to her.

Compared to Jean's losses, mine were trivial! I could, and still do, take one or two walks on the paved path in the village (I use my walker for balance). With Karen's help in transferring the handwritten first drafts of my writings to the computer and Darla's editing assistance, I have been able to continue an intellectual activity that has always given me great joy.

Each year, I send an annual report to the Head, Department of Biological Sciences; Dean, College of Sciences; and University Provost. Since my formal retirement, I have prepared such a report (Appendix 5) each year, although it is not mandatory to do so.

For five months after Jean's death, I was in shock, even though I had already realized that our remaining time together was short. During this time, Kathy Brady, Jean's friend and roommate, and I shared memories of the happy time when I first met Jean. For months, Kathy and I had weekly talks, reconstructing that period. This interaction helped enormously to turn my attention

for loss to the wonderful years that Jean and I shared. I am now adding more images from that period to offset those from the last few years when Jean's continually expressive face became less so.

The National Research Council Committee that I chaired when the volume *Restoration of Aquatic Ecosystems: Science, Technology, and Public Policy* was prepared gave me a tee shirt that was inscribed: "Stochastic Events Happen." This inscription is good to remember in life, but especially in retirement and old age.

APPENDIX 5
Annual Report 2004

Professor: John Cairns, Jr.
Department: Biological Sciences

FACULTY ACTIVITIES REPORT
2004

Reporting Period:

Spring Semester 2004
Summer 2004
Fall Semester 2004

I. INSTRUCTIONAL ACTIVITIES

A. Courses Taught: NONE

B. Course Development: NONE

C. Advising: Since I chaired 74 graduate committees and served on over 200 committees chaired by others, I write at least one letter of recommendation per month, often more.

D. Connections to Research and Outreach: (1) Continue to assist faculty member Charles Jervis, Auburn High School, Riner, Virginia, with his special environmental program
(2) Was involved with two different graduate programs at Radford University

E. Professional Development: NONE

F. Honors and Awards: (1) Elected on 8 June 2004 as Honorary Member (its highest honor) of the World Innovation Foundation founded by Nobel Laureate Glenn Seaborg
(2) Invited plenary session speaker (my address will be read by a colleague in the Russian National Academy of Sciences) at the Symposium "The Future of Life on Earth and of Our Civilization," 2-6 May 2005 at Frankfurt University, Germany

II. RESEARCH AND/OR CREATIVE ACTIVITY

Publications Since the 2003 Report

Books

Cairns, Jr., Jr. 2004. Eco-Ethics and Sustainability Ethics, Part 2. Ethics in Science and Environmental Politics, Eco-Ethics International Union, Oldendorf/Luhe, Germany. <http://www.int-res.com//journals/esep/esepbooks/EB2Pt2.pdf>

Articles in Peer-reviewed Journals

1. Cairns, J., Jr. 2003. The unmanaged commons: A major challenge for sustainability ethics. The Social Contract XIV(2):136-145.

2. Cairns, J., Jr. 2004. Self-regulating versus subsidized ecosystems. Int. J. Sustain. Develop. World Ecol. 11:36-47.
3. Cairns, J., Jr. 2004. Sustainability ethics: World population growth and mitigation. Mankind Quarterly XLV:169-194.
4. Cairns, J., Jr. 2004. Sustainability ethics: Zero net immigration. The Social Contract XV(1):58-71.
5. Cairns, J., Jr. 2004. Taboos and denials: Major obstacles to sustainable use of the planet. Sci. Soc. 2(1):15-24.

Articles in Internet, Peer-reviewed Journals

1. Cairns, J., Jr. 2003. Tribute to Garrett Hardin. Garrett Hardin Society. http://www.GarrettHardinSoc.org/tributes/tr_cairns_2003sept.html
2. Cairns, J., Jr. 2003. The unmanaged commons: A major challenge for sustainability ethics. Garrett Hardin Society. <http://www.thesocialcontract.com/cgi-bin/showarticle.p1?articleID=1206terms=>
3. Cairns, J., Jr. 2004. Allocating finite resources on a finite planet. Ethics in Science and Environmental Politics <http://www.esep.de/articles/esep/2004/E47.pdf>
4. Cairns, J., Jr. 2004. Choosing model nations to set examples for achieving sustainability. Ethics in Science and Environmental Politics <http://www.esep.de/articles/esep/2004/E46.pdf>
5. Cairns, J., Jr. 2004. Coping with ecological catastrophe: Crossing major thresholds. Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep/2004/E56.pdf>
6. Cairns, J., Jr. 2004. The ethics of global resource allocation. Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep/2004/E58.pdf>
7. Cairns, J., Jr. 2004. Future of life on Earth. Ethics in Science and Environmental Politics <http://www.esep.de/articles/esep/2004/E41.pdf>
8. Cairns, J., Jr. 2004. Is human society in denial regarding the tough questions about sustainability? Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep/2004/E54.pdf>
9. Cairns, J., Jr. 2004. Life defining experiences B Rocky Mountain Biological Laboratory. <http://www.rmbl.org>
10. Cairns, J., Jr. 2004. Remaining on stage in the planetary theater. Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep/2004/E51.pdf>
11. Cairns, J., Jr. 2004. Second tribute to Garrett Hardin. The Garrett Hardin Society. http://www.GarrettHardinSociety.org/tributes/tr_cairns_2004mar.html
12. Cairns, J., Jr. 2004. Small islands: Harbingers of Earth=s ecological fate? Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep/2004/E48.pdf>
13. Cairns, J., Jr. 2004. Sustainability and the anthropogenic alteration of evolutionary processes. Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep.2004/E55.pdf>
14. Cairns, J., Jr. 2004. Sustainability ethics matter. Ethics in Science and Environmental Politics <http://www.esep.de/articles/esep/2004/E42.pdf>
15. Cairns, J., Jr. 2004. Sustainability ethics: tales of two cultures. Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep/2004/E50.pdf>

16. Cairns, J., Jr. 2004. Sustainability and specialization. Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep/2004/E49.pdf>
17. Cairns, J., Jr. 2004. Will the real sustainability concept please stand up? Ethics in Science and Environmental Politics <http://www.int-res.com/articles/esep/2004/E53.pdf>
18. Cairns, J., Jr. 2004. You and Earth's resources. Ethics in Science and Environmental Politics <http://www.esep.de/articles/esep/2004/E45.pdf>

Reviews/Miscellaneous

1. Cairns, J., Jr. 2004. Review of The Culture of Extinction: Toward a Philosophy of Deep Ecology by Frederic L. Bender. Quarterly Rev Biol. 79(3):329-330.
2. Cairns, J., Jr. 2004. Review of The Essential Agrarian Reader: The Future of Culture, Community, and the Land by N. Wirzba, ed. New River Free Press 22(1):6.
3. Cairns, J., Jr. 2004. Review of Just Sustainabilities: Development in an Unequal World by J. Agyeman, R. Bullard, and B. Evans, ed. New River Free Press 22(2):6.
4. Cairns, J., Jr. 2004. Review of The Last Refuge: Patriotism, Politics, and the Environment in an Age of Terror by David W. Orr. New River Free Press 22(6):7.
5. Cairns, J., Jr. 2004. Review of The Love of Nature and the End of the World by Sherry Weber Nichol森. New River Free Press 22(4):6,8.
6. Cairns, J., Jr. 2004. Review of One with Nineveh: Politics, Consumption, and the Human Future by P. R. Ehrlich and A. H. Ehrlich. New River Free Press 22(7):10.
7. Cairns, J., Jr. 2005. Back cover quote for Ecology and Management of a Forested Landscape: Fifty Years on the Savannah River Site by J. C. Kilgus and J. I. Blake. Island Press, Covelo, CA.

Accepted for Publication Since the 2003 Report

Chapters in Books

1. Cairns, J., Jr. In press. Ecological restoration. In R. Abramson and J. Haskell, ed. Encyclopedia of Appalachia. University of Tennessee Press, Knoxville, TN.
2. Cairns, J., Jr. In press. Ecotoxicology: The role of biological monitoring. In C. S. K. Mishra, ed. CBS Publishers, New Delhi, India.
3. Cairns, J., Jr. In press - Invited chapter. Ethical issues associated with ecological restoration. In S. Sharma, ed., Perspectives in Environmental Research. Scientific Publishers, Jodhpur, India.
4. Cairns, J., Jr. In press. Forward. In M. V. Reddy, ed., Tropical Eutrophic Lakes: Their Restoration and Management. Oxford and IBH Publishing Co., Pvt. Ltd., New Delhi, India and Science Publishers, Inc., New Hampshire.
5. Cairns, J., Jr. In press. Healing damaged aquatic ecosystems. In N. K. Shastree, Current Trends in Limnology, Vol. 2. M/s Narendra Publishing House, New Delhi, India.
6. Cairns, J., Jr. In press. War and sustainability. In Preparing for Peace. Westmoorland General Meeting, Society of Friends, England.

Articles in Peer-reviewed Journals

1. Atkinson, R. B., J. E. Perry, and J. Cairns, Jr. In press. Vegetation communities of 20-year old created depressional wetlands. Wetlands Ecology and Management.
2. Cairns, J., Jr. In press. The age of transition to sustainability: The end of the exponential growth period. Politics and the Life Sciences.
3. Cairns, J., Jr. In press. Avoiding a posthuman world. Sci Soc.
4. Cairns, J., Jr. In press. Biographical memoir: Garrett Hardin. Proc. Am. Phil. Soc.
5. Cairns, J., Jr. In press. Ecological tipping points: A major challenge for experimental sciences. Asian J. Exper. Sci.
6. Cairns, J., Jr. In press. Immigration and carrying capacity. Sustain. Comm. Rev.
7. Cairns, J., Jr. In press. Monitoring for global change. J. Clean Tech. Environ. Toxicol. Occup. Med.
8. Cairns, J., Jr. In press. Sustainable coevolution. Int. J. Sustain. Develop. World Ecol.

Reviews/Miscellaneous

1. Cairns, J., Jr. In press. Review of Boiling Point by Ross Gelbspan. New River Free Press.
2. Cairns, J., Jr. and J. R. Heckman. In press. Review of Everglades: The Ecosystem and Its Restoration by S. M. Davis and J. C. Ogden. Ecol. Econ.

Submitted Since the 2003 Report

Books

- Cairns, J., Jr. In review. My Quest for Sustainable Use of the Planet.

Chapters in Books

1. Burdyuzha, V. and J. Cairns, Jr. Submitted. The declaration of the future: Preserving life on Earth: Charge to participants. In V. Burdyuzha, ed., Proceedings UN Symposium The Future of Life and the Future of Our Civilization, 30 April - 7 May 2005. Saarland University, Saarbruchen, Germany.
2. Cairns, J., Jr. Submitted. Biomonitoring with micro- and mesocosms. In L. C. Rai and J. P. Gaur, ed., Microalgal Technologies for Environmental Monitoring and Remediation.
3. Cairns, J., Jr. Submitted, invited chapter. Human alteration of evolutionary processes. In V. Burdyuzh, ed., Proceedings UN Symposium, The Future of Life and the Future of Our Civilization, 30 April - 7 May 2005. Saarland University, Saarbruchen, Germany.
4. Cairns, J., Jr. Submitted. The influence of contaminated sediments on sustainable use of the planet. In T. A. T. Aboul-Kassim, ed. Contaminated Sediments: Characterization, Chemodynamics, Assessment and Remediation. Springer-Verlag, Germany.
5. Cairns, J., Jr. Submitted. Toxicity and sustainable use of the planet. In The Encyclopedia of Water. John Wiley & Sons, Inc., New York.

Articles in Peer-reviewed Journals

1. Cairns, J., Jr. Submitted. Lifeboat ethics: To sink or not to sink. The Social Contract.
2. Cairns, J., Jr. Submitted. The two new competing cultures: Exemptionalists vs environmentalists. Sust. Comm. Rev.

Reviews/Miscellaneous

1. Cairns, J., Jr. Submitted. Review of All Flesh Is Grass: The Pleasures and Promises of Pasture Farming by Gene Logsdon. New River Free Press.
2. Cairns, J., Jr. In review. Review of Ecoregion-Based Design for Sustainability by Robert S. Bailey. Environ. Conserv.
3. Cairns, J., Jr. Submitted. Review of A Poverty of Reason: Sustainable Development and Economic Growth by Wilfred Beckerman. Int. J. Sustain. Develop. World Ecol.
4. Cairns, J., Jr. Submitted. Review of Red Sky at Morning: America and the Crisis of the Global Environment by James Gustave Speth. New River Free Press.

In Preparation Since the 2003 Report

Books

1. Cairns, J., Jr. In prep. Avoiding a Posthuman World.
2. Cairns, J., Jr. In prep. Forum organizer and editor – Consilience of Economics and Ecology: Ethics in Action or Inaction? Theme Section, Ethics in Science and Environmental Politics, Eco-Ethics International Union, Oldendorf/Luhe, Germany.

Articles in Peer-reviewed Journals

1. Cairns, J., Jr. In prep. The ABCs of sustainable living. Unitarian/Universalist World.
2. Cairns, J., Jr. In prep. The effects of the biotic crisis on evolution and the carrying capacity.
3. Cairns, J., Jr. In prep. Measuring your personal impact on Earth. New River Valley Free Press.
4. Cairns, J., Jr. In prep. Preparing to monitor for sustainable use of the planet. Int. J. Sustain. Develop. World Ecol.
5. Cairns, J., Jr. Invited paper. The relationship between ecological restoration and sustainable use of the planet. Restoration Ecology.
6. Cairns, J., Jr. In prep. Sustainability and the global commons. Sust. Comm. Rev.
7. Cairns, J., Jr. In prep. Thresholds, application factors, biological monitoring, and the precautionary principle. Environ. Pract.

Articles in Internet, Peer-reviewed Journals

1. Cairns, J., Jr. In prep. Ethics for a finite planet. Ethics in Science and Environmental Politics.
2. Cairns, J., Jr. In prep. Foregoing personal gratification for persons and species unknown. Ethics in Science and Environmental Politics.

3. Cairns, J., Jr. In prep. How many people will nature permit? Ethics in Science and Environmental Politics.
4. Cairns, J., Jr. In prep. Natural capital: supply and demand.
5. Cairns, J., Jr. In prep. Newspaper articles, website references, the popular press, and ESEP. Ethics in Science and Environmental Politics.
6. Cairns, J., Jr. In prep. Unsustainable living: A major failure in humankind's eco-ethics. Ethics in Science and Environmental Politics.

III. SERVICE

A. Public Service: Assisted a number of communities, citizen groups, and both private and public organizations with development of sustainability policies

B. University Service: I gave a seminar to Professor Marion Ehrich's course, Pharmacology and Toxicology Testing

C. Professional Service:

Section Editor, Aquatic Toxicology, Toxicology and Industrial Health, 1983-present

Section Editor, Aquatic Toxicology, Journal of Environmental Pathology, Toxicology and Oncology, 1983-present

Editorial Board, Aquatic Toxicology, 1989-present

Advisory Board, Environmental Professional (currently Environmental Practice) 1988-present

Editorial Board, Hydrobiologia, 1979-present

Editorial Board, Ecotoxicology, 1991-present

Editorial Board, Issues in Environmental Science and Technology, 1992-present

Consulting Editor, Journal of Aquatic Ecosystem Stress and Recovery, 1997-present

Associate Editor, Ecosystem Health and Medicine, 1993-present

International Editor, Journal of Environmental Sciences China, 1995-present

Board of Editors, Ecosystem Health, 1995-present

Editorial Board, Sustainable Communities Review, 1997-present

Advisory Board, Journal of Frontier Sciences, 1998-present

Editor, Ethics in Science and Environmental Politics, 2000-present

Editorial Board, Common Ground, 1999-present

Advisor, Asian Journal of Experimental Sciences, Elsevier Publishers, 2004-present

IV. STATEMENT OF PLANS AND GOALS FOR ACADEMIC YEAR 2005:

I hope my continuing recovery from four spinal compression fractures will soon permit acceptance of the invitations that have been piling up to give seminars.

The third draft of my professional autobiography is nearing completion and should be ready to distribute to 17 reviewers in a few months.

I have been using peer-reviewed Internet journals frequently because they reach a much broader, sizable readership.

I have a moderate amount of work done on a book *Avoiding a Posthuman World* and will give Part I major attention as soon as my autobiography is in the final stages of publication.

A colleague in the National Academy of Engineering and a publisher have been urging me to get busy on a forum titled "Consilience of Economics and Ecology: Ethics in Action or Inaction?" which I would organize and then serve as editor of the volume.

I have invitations from two journals in which I have not published before to submit a manuscript and open invitations from journals in which I have already published. There are enough manuscripts in various stages of completion to occupy my time for the next year.

Since I have wanted to increase my activities locally, I have been writing book reviews for the *Free Press* because it has a strong interest in environmental matters. Since the editors welcome these reviews, I expect to continue writing them for some time.

I am now nearing 1,500 publications and am deeply indebted to Bob Jones for encouragement and support in continuing to publish. My editorial assistant Darla Donald has been extremely helpful for 30 years in keeping publications flowing—I hope this productive relationship continues for many years.

Signed _____

Date _____

PUBLICATIONS

CAIRNS' PUBLICATIONS SINCE THE 2003 REPORT

	Published	In Press	Submitted	In Preparation
Books	1	0	1	2
Chapters	0	6	5	0
Articles (including electronic)	23	8	2	13
Abstracts	0	0	0	0
Reviews	7	2	4	0
TOTAL	31	16	12	15

Total Publications for 2003 = 59 (excluding in preparation publications)

Career Total Publications = 1489